

High School to College and Career Pathway: Secondary

Area of Study: Information Technology Education



Pathway: Information Support & Services

Database Development & Administration

Middle School		State Requirements			High School Suggested Education Plan				College & Careers
7 th Grade	8 th Grade	Middle School		High School	9 th Grade Suggested	10 th Grade Suggested	11 th Grade Suggested	12 th Grade Suggested	Beyond High School
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts	3.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	(1 additional credit -- class of 2011)	<p>There are a number of options for education and training beyond high school, depending on your career goals.</p> <p>> Certificate</p> <p>> Associate degree</p> <p>> Bachelor degree</p> <p>> Professional degree</p> <p>> On-the-job training</p> <p>> Apprenticeship</p> <p>> Military training</p>
Pre-Algebra 1.00	Elm. Algebra or Applied Math 1.00	2.00	Math	2.00	Geometry or Applied Math II 1.00	Intermediate Algebra 1.00	(1 additional credit -- class of 2011)		
Science .50	Science 1.00	1.50	Science	2.00	Earth Systems 1.00	Biological Science 1.00	(1 additional credit -- class of 2011)		
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	World Civilizations .50	Geography for Life .50	U.S. History II 1.00	U.S. Government and Citizenship .50	
P.E. 1.00	Health .50	1.50	P.E./Health	2.0	Participation Skills and Techniques .50	Fitness for Life. 50 / Health Education .50 Lifetime Activities or Sport .50			
The Arts .50	The Arts .50	1.00	Fine Arts	1.50	Fine Arts Courses 1.50				
			Financial Literacy	.50			Financial Literacy .50		
			Computer Tech.	.50	Computer Technology .50				
CTE Intro 1.00		1.00	Career and Technical Education	1.00					
<p>Workforce Trends</p> <p>Computer systems analysts, database administrators, and computer scientists are expected to be among the fastest growing occupations through the year 2012.</p> <p>Get the Facts</p> <p>Information Technology workers are needed in nearly every industry. The demand for technically skilled workers is growing in almost every industry, not just in those considered high-tech.</p>		<p>Core Curriculum and elective requirements may vary district to district. Check with your school counselor.</p> <p>Concurrent enrollment course offerings vary by school and district.</p>			Career and Technical Education Recommended Pathway Courses				<p>2.00 credits + 1.00 credit from introductory or elective courses</p> <p>3.00 credits for completion</p>
					(Students may select individual courses for exploration, or complete pathway for an in-depth focus.)				
					CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL				
					Course #	Introductory Courses: (preferred)		Credit	
					52.0417	Computer Technology		.50	
					11.0101	Information Technology, Introduction		.50	
					Foundation Courses: (required)				
					11.0301	Database Development I		1.00	
					Choose one of the following courses:				
					11.0201	Computer Programming I		1.00	
					11.0301	Database Development II		1.00	
Elective Courses:									
11.0202	Computer Programming II		1.00						
32.0199	Student Internship (Critical Workplace Skills)		.50						
<p>Many Utah post-secondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional post-secondary Pathways for details.</p>									

Note: For more information talk to your school counselor.

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Area of Study: Information Technology Education



Pathway: Information Support & Services Technical Support

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Get the Facts Technical support positions are in high demand both in IT and non-IT companies. Non-IT companies represent 79% of employment for IT workers.		Core Curriculum and elective requirements may vary district to district. Check with your school counselor. Concurrent enrollment course offerings vary by school and district.			Many Utah post-secondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional post-secondary Pathways for details.				3.00 credits for completion																																				

- Sample Occupations**
- > Computer Operator
 - > Help Desk Technician
 - > Microcomputer Support
 - > Network Control Operator
 - > Technical Support Specialist

For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov

Note: For more information talk to your school counselor.

High School to College and Career Pathway: Secondary

Area of Study: Information Technology Education



Pathway: Interactive Media Digital Media (Multimedia)

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<p>Workforce Trends</p> <p>Multimedia is the field of the future and is rapidly growing. Because our global economy is driven by technology, multimedia has become one of the most in-demand fields around. With nearly 75% of Americans using the Internet and over 85 million domains registered worldwide, the demand for individuals skilled in interactive media is high.</p> <p>Get the Facts</p> <p>Multimedia programs combine art and technology to present text, images and sound in digital form.</p>		<p>Core Curriculum and elective requirements may vary district to district. Check with your school counselor.</p> <p>Concurrent enrollment course offerings vary by school and district.</p>			<p>Career and Technical Education Recommended Pathway Courses</p> <p>(Students may select individual courses for exploration, or complete pathway for an in-depth focus.)</p> <p>CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL</p> <table><tr><th>Course #</th><th>Introductory Courses: (preferred)</th><th>Credit</th></tr><tr><td>52.0417</td><td>Computer Technology</td><td>.50</td></tr><tr><td>11.0101</td><td>Information Technology, Introduction</td><td>.50</td></tr><tr><td></td><td>Foundation Courses: (required)</td><td></td></tr><tr><td>11.0210</td><td>Multimedia I: Design & Development</td><td>1.00</td></tr><tr><td></td><td><i>Choose one of the following courses:</i></td><td></td></tr><tr><td>11.0211</td><td>Multimedia II: Production</td><td>1.00</td></tr><tr><td>11.0215</td><td>3D Graphics and Animation</td><td>1.00</td></tr><tr><td></td><td>Elective Courses:</td><td></td></tr><tr><td>11.0201</td><td>Computer Programming I</td><td>1.00</td></tr><tr><td>11.0230</td><td>Web Development I</td><td>1.00</td></tr><tr><td>32.0199</td><td>Student Internship (Critical Workplace Skills)</td><td>.50</td></tr></table> <p>2.00 credits + 1.00 credit from introductory or elective courses</p> <p>3.00 credits for completion</p>				Course #	Introductory Courses: (preferred)	Credit	52.0417	Computer Technology	.50	11.0101	Information Technology, Introduction	.50		Foundation Courses: (required)		11.0210	Multimedia I: Design & Development	1.00		<i>Choose one of the following courses:</i>		11.0211	Multimedia II: Production	1.00	11.0215	3D Graphics and Animation	1.00		Elective Courses:		11.0201	Computer Programming I	1.00	11.0230	Web Development I	1.00	32.0199	Student Internship (Critical Workplace Skills)	.50	
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Area of Study: Information Technology Education



Pathway: Interactive Media

Web Development & Administration

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Pathway: Network Systems

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Pathway: Programming/Software Development

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Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	World Civilizations .50	Geography for Life .50	U.S. History II 1.00	U.S. Government and .50																																				
P.E. 1.00	Health .50	1.50	P.E./Health	2.00	Participation Skills and Techniques .50	Fitness for Life: 50 / Health Education .50 Lifetime Activities or Sport .50																																						
The Arts .50	The Arts .50	1.00	Fine Arts	1.50	Fine Arts Courses 1.50																																							
			Financial Literacy	.50			Financial Literacy .50																																					
			Computer Tech.	.50	Computer Technology .50																																							
CTE Intro 1.00		1.00	Career and Technical Education	1.00	Career and Technical Education Recommended Pathway Courses (Students may select individual courses for exploration, or complete pathway for an in-depth focus.) CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL				Sample Occupations > Computer Programmer > Computer Systems Analyst > Game Programmer > Software Engineer For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov																																			
Workforce Trends Demand for programmers to help organizations keep up with changing technology will continue. Prospects should be best for college graduates with knowledge of various programming languages and tools; those with less formal education or work experience should face keen competition. Get the Facts Programmers represent the largest size group of IT workers. A total of 22,000 average annual job openings are expected for computer programmers through the year 2010.		Core Curriculum and elective requirements may vary district to district. Check with your school counselor. Concurrent enrollment course offerings vary by school and district.		<table><tr><th>Course #</th><th>Introductory Courses: (preferred)</th><th>Credit</th></tr><tr><td>52.0417</td><td>Computer Technology</td><td>.50</td></tr><tr><td>11.0101</td><td>Information Technology, Introduction</td><td>.50</td></tr><tr><td colspan="2">Foundation Courses: (required)</td><td></td></tr><tr><td>11.0201</td><td>Computer Programming I</td><td>1.00</td></tr><tr><td colspan="2">Choose one of the following courses:</td><td></td></tr><tr><td>11.0202</td><td>Computer Programming II</td><td>1.00</td></tr><tr><td>11.0301</td><td>Database Development I</td><td>1.00</td></tr><tr><td colspan="2">Elective Courses:</td><td></td></tr><tr><td>11.0210</td><td>Multimedia I: Design & Development</td><td>1.00</td></tr><tr><td>11.0230</td><td>Web Development II</td><td>1.00</td></tr><tr><td>32.0199</td><td>Student Internship (Critical Workplace Skills)</td><td>.50</td></tr></table>				Course #		Introductory Courses: (preferred)	Credit	52.0417	Computer Technology	.50	11.0101	Information Technology, Introduction	.50	Foundation Courses: (required)			11.0201	Computer Programming I	1.00	Choose one of the following courses:			11.0202	Computer Programming II	1.00	11.0301	Database Development I	1.00	Elective Courses:			11.0210	Multimedia I: Design & Development	1.00	11.0230	Web Development II	1.00	32.0199	Student Internship (Critical Workplace Skills)	.50
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Many Utah post-secondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment. Check regional post-secondary Pathways for details.																																												

Beyond High School

There are a number of options for education and training beyond high school, depending on your career goals.

- > Certificate
- > Associate degree
- > Bachelor degree
- > Professional degree
- > On-the-job training
- > Apprenticeship
- > Military training

Sample Occupations

- > Computer Programmer
- > Computer Systems Analyst
- > Game Programmer
- > Software Engineer

For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov

Note: For more information talk to your school counselor.